

Multidisciplinary Research Needs for Invasive Plants in Southwestern North America

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Land managers need to be able to predict which species will likely invade, which types of habitats they will invade, and what the effects of these invasions will be. They also need to understand how various land use activities will affect invasive plants, and what these changes will mean within the broader context of ecosystem integrity. Multidisciplinary research approaches have the greatest promise for providing this information. Relationships should be studied between the life history characteristics of invasive species and the geomorphological and hydrological characteristics of landscapes. Temporal variations in these relationships should be evaluated in response to future shifts in climate, air pollution, and disturbance regimes. It is my hope that multidisciplinary collaborations among scientist, and improved communications between and among scientists and land managers, will lead to a greater capacity to manage invasive plants and minimize their negative ecological impacts.

Session II

10 Years of CalEPPC

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The Calif. Exotic Pest Plant Council (CalEPPC) was formed at a conference on wildland weeds in Moro Bay, Calif. in 1992. The conference was organized by scientists, academic researchers, conservation activists and land managers inspired by the example of the Florida Exotic Pest Plant Council. A Board of Directors is elected by the membership to serve staggered two-year terms, while officers are elected annually. Membership is open both to individuals and organizations. CalEPPC is incorporated as a 501 (c) (3) non-profit.

The group's mission is to protect California's biodiversity — its diverse plants and wildlife — from the threat posed by invasive exotic pest plants in the state's natural areas. This focus on biodiversity makes the organization's mission distinct from that of other organizations that fight weeds such as those focused on agriculture, water ways and rangelands. In many cases the missions overlap as the same weeds may be encountered and strategic alliances or coalitions formed.

The organization's membership is deliberately broad. It was decided by its early organizers to have a "broad tent" — that anyone who was interested in fighting invasive weeds would be welcome to join. It was a deliberate decision that membership would not be limited to organizations or agencies.

CalEPPC carries out this mission through education, research, policy advocacy, and coalition building. Education includes a quarterly newsletter, a web site that is constantly adding content, annual symposiums such as this one, regional workshops — often on a single weed or group of weeds such as *Arundo*, *Saltcedar* or the brooms, Proceedings of papers and posters presented at the symposia, authoring the new *Invasive Plants of California's Wildlands*, and helping to develop a K-12 curriculum and materials on invasive weeds.

CalEPPC promotes research into invasive weeds on several levels. With a grant from a private foundation for over \$250,000 CalEPPC financed a series of projects on the *Cortaderias*, pampas and jubata grasses. CalEPPC, in partnership with the Calif. Native Plant Society, has raised almost \$250,000 in four years to support Cape ivy biocontrol research by the U.S. Dept. of Agriculture (USDA) and its Agricultural Research Service (ARS). CalEPPC is now supporting the International Broom Initiative, seeking biocontrol agents for a variety of brooms and gorse.

From the beginning, CalEPPC has had a strong strategic alliance with the Calif. Native Plant Society (CNPS) and The Nature Conservancy. Over the years other alliances or partnerships developed with the Cattlemens Association, the Calif. Dept. of Parks and Recreation, the Calif. Dept. of Food and Agriculture, the USDA-ARS, and others. CalEPPC promotes and participates in coalitions such as the Team Arundos or the new Weed Management Areas. Nationally, it is a member of the National Association of EPPCs (NAEPPCs), an organization that includes other groups with different names, but similar missions. Nationally, a goal is to influence the broader policy making taking place with respect to invasive weeds such as the Invasive Species Council.